He, She, They, Zie: Transforming the Health of and Healthcare for Transgender Patients

The North American Forum on Family Planning

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Panelists

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Moderator

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Disclosures and Acknowledgments

- We have no financial relationships with commercial entities to disclose.
- Thank you to Julie Prussack, MD for slides.

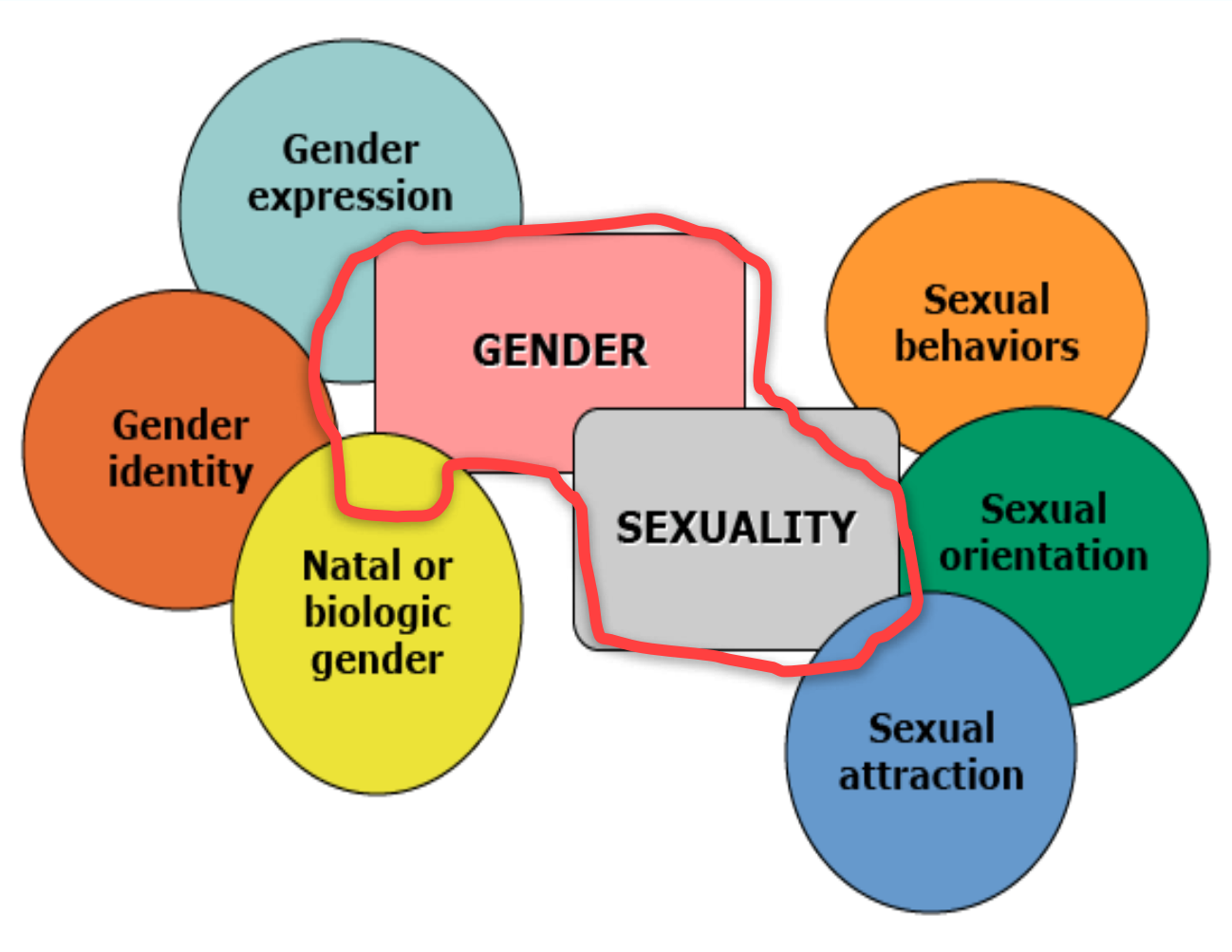
Learning objectives

- Differentiate natal sex, gender identity and expression, and sexual orientation.
- Explain how stigma and discrimination create disparities in health, income, quality of life, and basic human rights among transgender individuals.
- Describe at least three ways to create a transgender inclusive and affirming environment in your workplace
- Identify at least three strategies for providing and/or advocating for transgender patients.
- List at least three current gaps in research related to transgender health care.

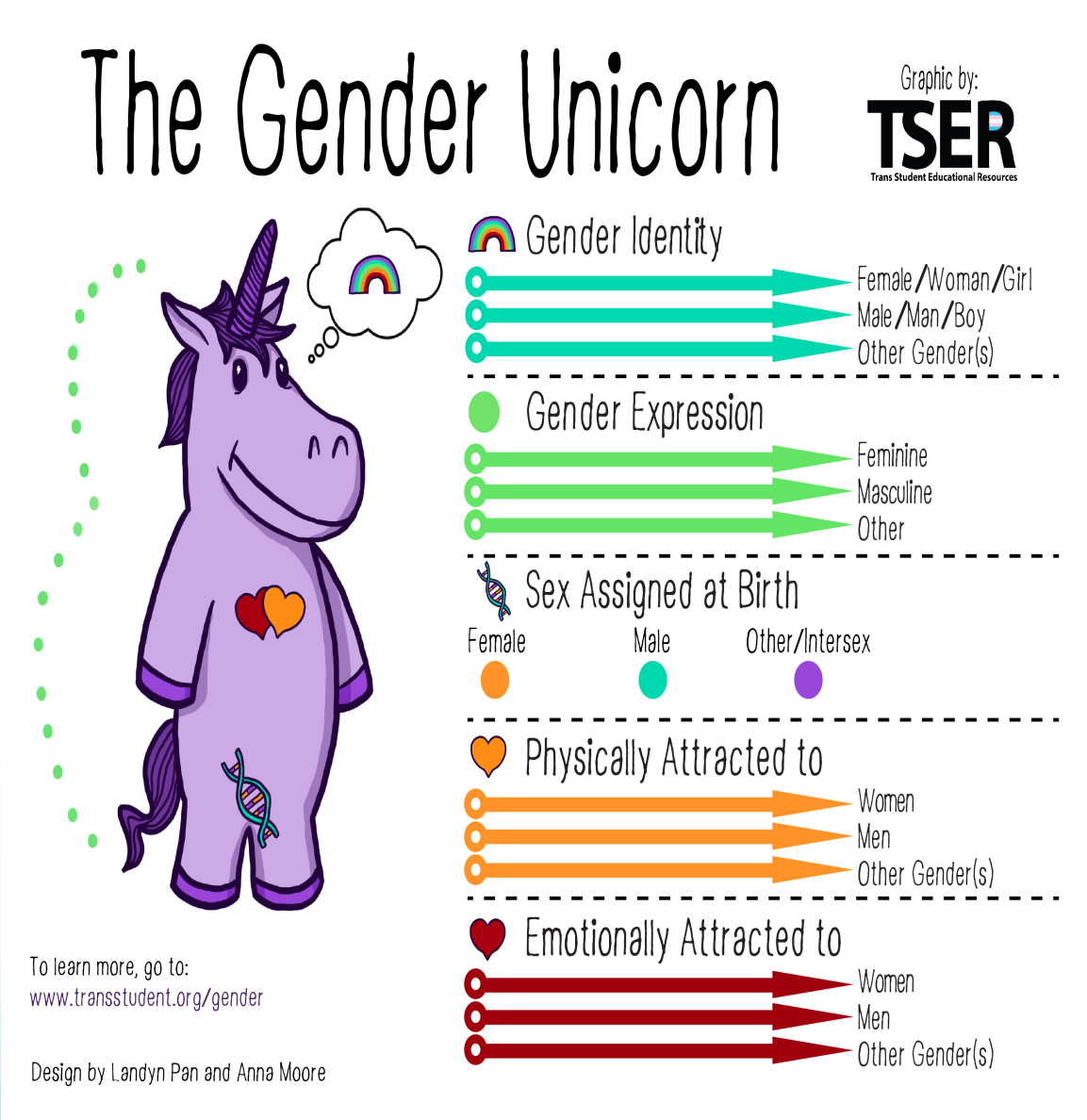
Our goal is to invigorate the reproductive health community to promote the health and happiness of transgender individuals

- For more resources, we can email you an electronic file containing:
  - This presentation
  - How to create a gender affirming environment
  - Terminology sheet
  - Medical and legal resources

GENDER➔WHO YOU ARE



SEXUALITY➔WHO YOU LOVE



Trans Student Educational Resources. Illustrations by Anna Moore. Design by Landyn Pan. URL: http://www.transstudent.org/gender

Terminology

- **Transgender (trans):** Gender identity, expression or behavior is different from those typically associated with assigned sex at birth
- **Cisgender**: Gender identity, expression or behavior is the same as those typically associated with assigned sex at birth
- **Transgender man (transman, FtM):** Transgender individual who currently identifies as a man
- **Transgender woman (transwoman, MtF)**: Transgender individual who currently identifies as a woman
- **Pronouns**: he, she, they, zie

Transgender Terminology. National Center for Transgender Equality. Washington, DC, January 2014. URL: http://www.transequality.org/sites/default/files/docs/resources/TransTerminology_2014.pdf

Michelle Forcier, MD, MPH

- Pediatrician
- Associate Professor at Alpert Medical School, Brown University
- Cares for over 400 gender diverse patients in New England
- Overview:
  - Gender identity formation during childhood/adolescence
  - Gender affirming care and hormones

Case 1: Childhood: Sammy, 9 years old

- Since toddler age rejected girls clothes, toys, best friends are all boys
- Has been having more trouble at school, grades & behaviors
- Told her mom that she did not want to have breasts, go through puberty like her sister
- Mom tells you this at her well woman visit since she is not sure what to do
- You are not sure if this is “just a phase” but want to learn more before you make any recommendations

Awareness of Gender Identity Begins Early

And Continues Across the Lifespan

Between ages 1 and 2
Conscious of physical differences between sexes

At 3 years old
Label themselves as girl or boy

By age 4
Gender identity is often stable, constant

Labels & Philosophy Inform Care

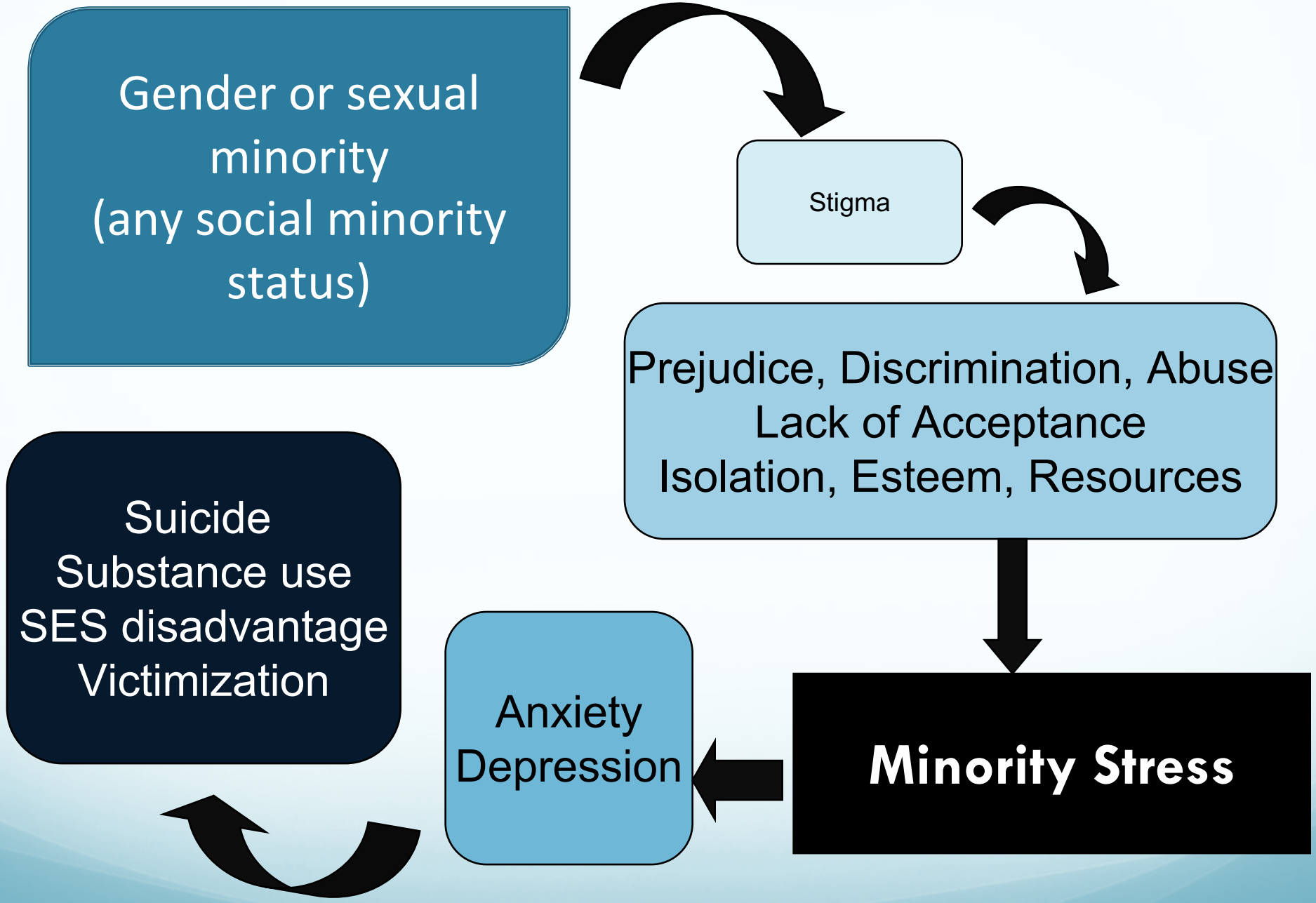
Sexuality & gender nonconformity as pathology or psychiatric

Pathologize
Stigmatize
Risk based
Deviation as disorder

Gender & Sexuality as developmental, fluid, evolving

Variance, nonconformity, different= DIVERSITY

- Spectrum, changing
- Identity & needs of each individual
- Goals > > "diagnosis"
- More congruent, comfortable whole self
- Safe & integrated socially


Gender or sexual minority
(any social minority status)
Stigma
Prejudice, Discrimination, Abuse
Lack of Acceptance
Isolation, Esteem, Resources
Minority Stress
Anxiety
Depression
Suicide
Substance use
SES disadvantage
Victimization

Early Social Transition

- Assuming cross gender expression to match identity
  - Multiple or all social settings
  - **Reversible**, cosmetic
  - Well planned & supported
  - Safety!!
- Considerations & preparation
  - Trial run – see how it feels, how child responds
  - Specifics – name, pronoun, clothing…restrooms, locker room, sleepovers
  - Disclosure or not…to whom…how to prepare
  - Family, school, friends, school, church, social groups

Case 1 : Adolescence, Sammy 10 years old

- Continues to be a “tomboy” but now mom worries that she is depressed, angry
- Sammy tells mom she hates her body
- Mom asks more and Sammy says, “I don’t want breasts. I think I am a boy.”
- Mom & Sammy come to meet w you to discuss

Ask More… Listen…

Gender Play

- Passing interest or trying out behaviors, activities, clothes & roles
- Shared characteristics but does not want to "be" other gender

Health provider role

- Nothing to "fix" … encourage & support
- Parents accepting, allowing child to be, loving child "as is"
- Ongoing relationship(s) for support & intervention

Gender Nonconformity

- Persistent, consistent, insistent
- Desire to be other gender
- Dysphoria about body & gender

Why Screen & Identify Early?

Family Acceptance Project Data

- 224 LGB white & Latino adults, ages 21 to 25 years
- Open sexual orientation to at least 1 parent during adolescence
- "Between ages 13–19, how often did your parents/caregivers…"

Association *parental rejecting behaviors* & negative health outcomes

OR	Negative Health Outcomes
3.4	Unprotected sex
5.9	Depression
5.6	Suicidality
8.4	Suicide attempt

RyanC Peds 2009, RyanC JChildAdolPsych Nursing 2010

- Cisgender, Heterosexual
- Cisgender, Homosexual
- Transgender or Gender Diverse

Behaviors & expression may non-conform, but children can still feel that they are in right-gendered body

Prepubertal Trajectories

Peri-Post Pubertal Trajectories

- Early, insistent presentation
- Prepubertal social transition
- Significant body/gender dysphoria

Close to 100% continue from blockers to cross gender hormones, surgery

...Continues into transgender adolescence

Steensma TD 2013, Malpas J 2011, Teurk CM 2012, Bussey K 2011, DeVries 2010, Wallien MS 2008, Drummon 2008, Zucker 2005, Green 1987, Davenport 1986

deVries AL 2014, Steensma TD 2013, deVries AL 2012, Spack NP 2012, deVries AL 2011, Steensma TD 2011

Puberty Blocking

- Ideal before or early Tanner 2
  - Maintain prepubertal status
  - Follow exam, LH, estradiol/testosterone
- Can use Tanner 3-5
  - Halt continued puberty changes
  - Prevent continued 2nd gender characteristics
  - Mental health & perimenopausal symptoms

Leuprorelin

Triptorelin

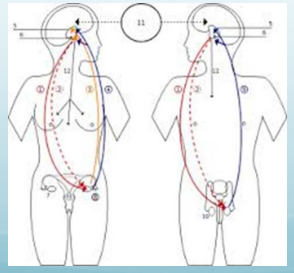
Goserelin

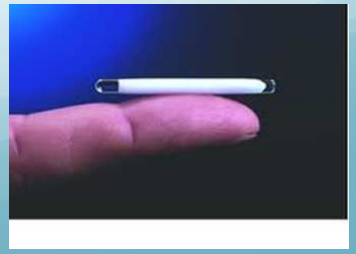
- **Monthly** $500-1000
- **3-monthly depot** $1500-2000

Histrelin implant

12-24 months

- $3500 (Vantas)
- 15,379.16 -$12,560.00 (Supprelin)





TransYouth Project

"Socially transitioned transgender children who are supported in their gender identity have developmentally normative levels of depression and only minimal elevations in anxiety, suggesting that psychopathology is not inevitable within this group. Especially striking is the comparison with reports of children with GID; socially transitioned transgender children have notably lower rates of internalizing psychopathology than previously reported among children with GID living as their natal sex."

Olson KR, Durwood L, DeMeules M, et al. Mental Health of Transgender Children Who Are Supported in Their Identities. Pediatrics. 2016;137(3):e20153223

Gender Affirming Hormones

Transition is More than Hormones

- Assess readiness for transition
  - Physical (Tanner stage) … Psychological … Social
  - Encourage patience for changes, effects
  - Focus on healthy lifestyle & plan
  - Encourage therapy- can provide skills, support to make transition easier, healthy
- Providers, parent(s), patient feel confident
- Comprehensive plan
  - Safety, health, happiness …
  - Review benefits risks desired outcomes

Testosterone Masculinization

	Injection		Transdermal gel	Transdermal patch
Agent	Testosterone cypionate	Testosterone enanthate	Testosterone crystals dissolved in gel	
Brand name	Depo-Testosterone®	Delatestryl®	AndroGel®	Androderm®
Pre-oophorectomy	**40-100 mg SQ every week** previously 100-200 mg IM every 2 weeks		5-10 g daily Start 2.5 grams if comorbid conditions could be worsened by testosterone	
Maintenance after 2 years	Reduce to level needed to keep serum free testosterone within lower-middle end male reference interval; Monitor risk of osteoporosis			

Irreversible Effects

- New & increased facial & body hair
- Deepen voice
- Clitoral enlargement
- ? Sterility, uterine atrophy

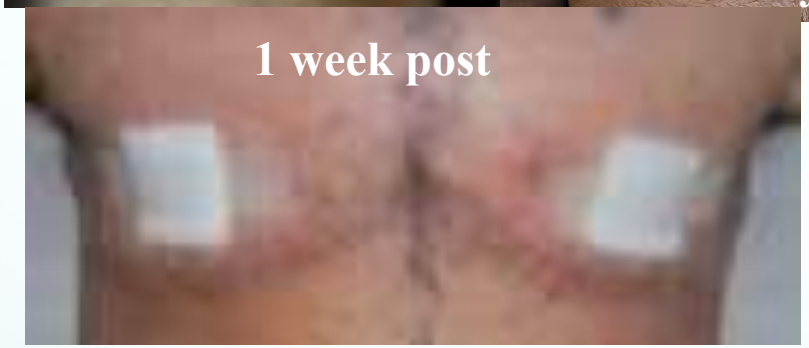
Estradiol Feminization

	Sublingual	Intramuscular	Transdermal	
Agent	17 b estradiol	Estradiol Cypionate Valerate	Patch	Gel
	generic			
Pre-orchiectomy	2-8 mg daily Sublingual 30 minutes, swish spit	5-20 mg IM q 1-2 weeks ?New data Subcutaneous?	0.1-0.4 mg twice weekly	1gm applied to skin 2-3 times daily
Maintenance after 2 years	Reduce to level needed to keep serum free testosterone suppressed, estradiol within average female range			

<u>Irreversible Effects</u>

- Breast development (nipple enlargement
- ? Sterility, erectile dysfunction, testicular atrophy

Double Incision Nipple Grafts



Brownstein, San Francisco

Dr. Lincenberg, Georgia

Brownstein, San Francisco

Results of Vaginoplasty & Labiaplasty

Dr. Meltzer, Arizona

Vaginoplasty only

W/Labiaplasty 10 mos

Dr. Suporn, Thailand

5 months post op

Dr. Bowers, California

6 months post op

Dr. McGinn, Pennsylvania

Before

After

Metoidioplasty w/ Scrotoplasty & Implants

Dr. Meltzer, AZ

6 months post

Dr. Brassard, Montreal

3 years post

Dr. Perovic, Belgrade Serbia

2 months post

Take Away Points

- Gender is ubiquitous, developmental, and diverse
- Talking to patients about gender
  - Throughout lifespan
  - May improve early identification, support, treatment
- Gender affirming therapies can improve health and well being
  - Social Transition
  - Puberty blockers
  - Hormones, estradiol and testosterone
  - Surgeries
- **Respect for gender autonomy = reproductive justice!**

Sarah Pickle, MD

- Family Physician
- Assistant Professor, University of Cincinnati College of Medicine
- Expertise in abortion care and gender affirming therapies within context of primary care
- Overview: Reproductive Health Care of Transgender Men
  - Contraception, fertility, pregnancy, cervical cancer screening

Case: Zayd

- 24 yo transgender male with who will be starting gender affirming hormones. Before starting testosterone cypionate, Zayd asks you the following questions:
  - What are my birth control options if I have sex with partners who could get me pregnant?
  - What if I want to have future biologic children?
  - What do I need to plan for now and what are my chances of getting pregnant in the future?
  - Do I still need a Pap?

Contraception

- Gender affirming hormones decrease fertility
- Ovulation may occur without regular menses and sperm may still be produced
- Few studies on contraceptive needs
- Cipres et al (2016) - 13 transgender men on testosterone identified at risk for pregnancy
  - 11/13 (85%) wanted to avoid pregnancy
  - 7/13 (63%) used condoms
  - EC, diaphragm, IUD use low among the 26 patients

Light , Obstet Gynecol, 2014; Van Der Broecke, Hum Reproduc. 2001 ; Cipres, et al. Contraception. 2016.

Contraception in Transgender Men

- Most patients want to avoid estrogen
- Menstrual cycle control
  - Menstrual related dysphoria
  - Amenorrhea
  - Endometrial protection
- Depo-medroxyprogesterone acetate
- Levonorgestrel IUD, Copper IUD, etonorgestrel implant
- Emergency Contraception, Condoms

Fertility Preservation

- WPATH and Endocrine Society recommend discussion of family planning with all patients
- AMA and ACOG issued non-discrimination policies regarding ART
- Transgender patients have fertility preservation needs (Wierck,et al 2012)
  - 50 transgender men involved with a partner
  - 18% considered freezing germ cells before transition but never spoke with provider
  - 37.5% would have considered freezing germ cells if service was available

Wierckx, Human Reprod, 2012

Assisted Reproductive Technologies

	Assigned Male at Birth		Assigned Female at Birth		
	Sperm Banking	Testicular Tissue Freezing	Embryo	Oocyte	Ovarian Tissue
Medical Status	Standard	Experimental	Standard	Standard*	Experimental
Description	Storing sperm, obtained via masturbation, minor surgery, or electrical stimulation	Surgically removing and then freezing testicular tissue for future use	Harvesting eggs, in vitro fertilization(IVF) and freezing embryos for implantation	Harvesting and freezing unfertilized eggs	Surgically removing and freezing ovarian tissue for implantation
Age	After puberty	Before or after puberty	After puberty	After puberty	Before or after puberty
Approximate cost	~$500 per sample plus storage	Varies	12,000/cycle, plus cost of medications and storage	8-12,000/cycle plus storage	12,000 for procedure plus storage costs

Allensworth, Gynecol Endocrinol, 2014; Woodruff, Oncofertility, 2007; Noyes, Reprod Biomed Online, 2009; Wallace, Gynecol Endocrinol, 2014; Allensworth, Gynecol Endocrinol, 2014; Wierckx, Human Reprod, 2012; Waimey, Womens Health., 2015

Pregnancy in Transgender Men

- Survey of 41 Transgender Men who experienced pregnancy (Light, et al 2014)
  - 61% (n=25) used testosterone prior to pregnancy
  - 80% (n =20) of those on testosterone resumed menses within 6 months after stopping
  - 20% (n=5) conceived while still amenorrheic
  - 68% (n = 28) were planned
  - 7% (n=3) used fertility drugs to achieve pregnancy, 12% (n=5) used ART
- No literature on abortion rates in transgender men

Cervical Cancer Screening for Transgender men

- Same recommendations as cis-gender females endorsed by multiple organizations (ACS, ASCCP, ASCP, USPSTF, WHO)
- Should never be a requirement for testosterone therapy
- No cervical cancer screening needed after total hysterectomy
- New directions that may be more patient acceptable
  - Self-collected vaginal samples
  - Concordance of urine HPV with cervical HPV

Cervical Cancer Screening for Transgender Men

- Myths re: Transgender Men
  - Fewer sexual partners
  - Never have penetrative vaginal sex with digits, sex toys, or genitals or only had penetrative sex prior to transition
  - Never have sex with cis-men or receptive vaginal sex
  - If lesser risk HPV, it's not important to screen- especially if it is uncomfortable for patient
- 10x more inadequate Pap results than cis-women
  - Typical causes of inflammation
  - Testosterone-mediated atrophic cervicovaginitis
  - Inflammation obscure cervical cytological evaluation

Potter et al, J Gen Intern Med, 2015; Peitzmeier at al, J Gen Intern Med, 2014.

Janson Wu, JD

Executive Director: GLBTQ Legal Advocates & Defenders (GLAD)

Marriage equality, DOMA, family law, rights of transgender individuals

Overview of state and federal laws regarding:

- -Access to health care
- -Non-discrimination protections
- -IDs and legal sex

Access to health care

- Insurance coverage
- Role for health care providers
- Minors
- Case Study – Lee from Rhode Island

Creating a Gender Affirming Clinical Environment

- Electronic records & forms include two-step gender identity fields: gender identify and sex assigned at birth
- Gender neutral bathrooms
- Staff training regarding greeting and addressing patients in gender affirming manner

Nondiscrimination protections for transgender individuals

- Title VII and IX litigation strategy
- Section 1557
- ADA
- Medical amicus briefs

What is your legal sex?

- Your ID ≠ your legal sex
- Inaccurate ID impacts the lives of transgender people
- What is the role of the health care provider and the health team?

Our goal is to invigorate the reproductive health community to promote the health and happiness of transgender individuals

- For more resources, we can email you an electronic file containing:
  - This presentation
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Discussion Time

Case: Sebastian….. Sonia

- Sonia 35 yo has now been on estradiol for 5 years, s/p breast implants and s/p vulvovaginoplasty for 3 months
- She is here for annual well woman exam
- She also has some concerns as with going back to work she has had less time to dilate and wonders if re starting sexual intercourse can take the place of dilation?
- What screening & testing options might you offer?
- How might you advise her on sex and vaginal health?

What to Expect -Vulvovaginoplasty

- Pre Op hair removal
  - Most reliable - before surgery scrotal electrolysis, at least three full clearings 8-12 weeks apart
  - At time of surgery cauterization of visible hair follicles
- Penile inversion technique
  - Penile skin creates vaginal vault between rectum & urethra, w scrotum forming labia majora, clitoris from glans penis.
  - Prostate left in place avoids incontinence, urethral strictures & provides erogenous
  - Depth 15 cm (6 inches) vs cis sizing 9-12cm (3.5-5 inches)
  - No self-lubrication, need external lubricant for dilation or receptive sex
- Colon/small bowel technique
  - Primary indication - revision of prior penile-inversion vaginoplasties
  - Advantage- less need for dilation, greater depth self-lubricating
  - Risks – more fragile mucosa, constant discharge, bacterial overgrowth & risk of bowel diseases

Risks and Complications

Immediate post op

-Bleeding, infection, skin or clitoral necrosis, suture line dehiscence, urinary retention or vaginal prolapse

-Fistulas

- Rectovagina midline 5 cm of vaginal opening as result of surgical injury to rectum w symptoms of flatus to stool drain in vagina
- Urethrovaginal present with urine leakage from vagina, mostly continent but susceptible to urinary tract infections esp after sex
- Cystovaginal -least common, most difficult to manage

Later

Granulation tissue blood-streaked yellow discharge

- If persistent, regular silver nitrate treatments, steroid cream (triamcinolone), medical grade honey (Medihoney)

UTI –check for urethral stricture passing 16F catheter into bladder to rule out strictures, post-bulbar or meatal stenosis

Sensation, orgasm

- Lawrence 2003 86% orgasmic

What to Know Post Op

- Adherence w dilation regimen is critical at least 1 year postoperatively
  - Loss of vaginal girth due to inadequate dilation increase dilation frequency
  - Loss of vaginal depth is more difficult to address by dilation alone
- Persistent pain
  - Small pelvic inlet, muscle spasm and vaginismus consider botulinum toxin, removal webbing, specialist pelvic pain and pelvic floor issues
- Colonization w skin & vaginal flora
  - Mobiluncus, and Bacteroides, Staphylococcus, Streptococcus, Enterococcus, Corynebacterium
  - Rare Lactobacilli 1/30 women, no candida was not found (low ph, skin not mucosa)
  - No correlation between vaginal symptoms and any 1 bacteria
  - Vaginal discharge and odor in transgender women is unlikely to due to BV or yeast but can be due to sebum, dead skin or keratin debris, or retained semen or lubricant.
- Routine cleaning/douching with soapy water
  - Initially daily …. 2-3x/week when dilation is less frequent
  - Vinegar or 25% povidine iodine in water for 2-3 days for flora overgrowth, consider empiric 5-day f vaginal metronidazole if still symptomatic